

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/IB 03/05427

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G01N33/68 C12Q1/48 G01N33/543

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G01N C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, EMBASE, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	NELSON R W: "The use of bioreactive probes in protein characterization." MASS SPECTROMETRY REVIEWS. 1997 NOV-DEC, vol. 16, no. 6, November 1997 (1997-11), pages 353-376, XP002284011 ISSN: 0277-7037 figure 1 page 357, left-hand column, line 10 - line 15 page 371, left-hand column, last paragraph - page 374, left-hand column, paragraph 1 -/--	1-9, 21-28

☒ Further documents are listed in the continuation of box C.☐ Patent family members are listed in annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

30 June 2004

Date of mailing of the international search report

08. 11. 2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Weber, P

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Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-4, 6-9, 12-28 (partially) 5, 10, 11 (fully)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-4,6-9,12-28 (partially) 5,10,11 (fully)

Method of determining the activity of a kinase or a hydrolase.

- 1.1. claims: 1-9,12-28 (partially) 10,11 (fully)

Method of determining the activity of a kinase.

- 1.2. claims: 1-9,12-28 (partially)

Method of determining the activity of a hydrolase.

2. claims: 1-4,6-9,12-28 (partially)

Method of determining the activity of an oxidoreductase.

3. claims: 1-3,6-9,12-28 (partially)

Method of determining the activity of a transferase not being a kinase.

4. claims: 1-4,6-9,12-28 (partially)

Method of determining the activity of a lyase.

5. claims: 1-4,6-9,12-28 (partially)

Method of determining the activity of a ligase.

6. claims: 29-36 (fully)

Mass spectrometer probe with immobilised array of enzymes.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>- & DOGRUEL D ET AL: "RAPID TRYPTIC MAPPING USING ENZYMATICALLY ACTIVE MASS SPECTROMETER PROBE TIPS" ANALYTICAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY. COLUMBUS, US, vol. 67, no. 23, 1 December 1995 (1995-12-01), pages 4343-4348, XP000540116 ISSN: 0003-2700 page 4344, left-hand column, last paragraph - right-hand column, paragraph 2 -----</p> <p>ZHU H ET AL: "ANALYSIS OF YEAST PROTEIN KINASES USING PROTEIN CHIPS" NATURE GENETICS, NATURE AMERICA, NEW YORK, US, vol. 26, November 2000 (2000-11), pages 283-289, XP000994841 ISSN: 1061-4036 the whole document -----</p>	10
A	<p>NEWTON RUSSELL P ET AL: "Assay of adenosine 3',5'-cyclic monophosphate-dependent protein kinase activity by quantitative fast atom bombardment mass spectrometry" ANALYTICAL BIOCHEMISTRY, vol. 224, no. 1, 1995, pages 32-38, XP002285382 ISSN: 0003-2697 the whole document -----</p>	1-28